

FY2014-2018 Five-Year Capital Improvement Plan



City of Newton, Massachusetts Setti D. Warren, Mayor 15 October 2012

Goal of the 5-yr CIP

- Comprehensive, integrated, prioritized, datadriven, and transparent
- Reflect our community values in how we invest capital dollars
- Support critical City programs & services
- Adhere to financial & environmental best practices- linked to Financial Forecast

Capital Plan: Verson 2.0

- Consequence of "Energy Impact"
 - added weight to those projects affecting energy consumption and conservation
- 20-year Outlook
 - provided a 20-year outlook of facility capital costs to make better decisions today
- Escalated Project Costs
 - escalated estimated costs by 3.5% to better reflect the true cost of a project in the future

20-year Projected Capital Needs

By Asset Type-

| | 1 | City of Newton 20 Year Long Range Ca | apital Projection | | | | |
|---------|--------------|---|-------------------|---------------|---------------|---------------|---------------|
| | 2 | Cost estimates include 3.5% escalation. | | | | | |
| | 3 | ASSET TYPES | FY14-FY18 CIP | FY19-FY23 CIP | FY24-FY28 CIP | FY29-FY33 CIP | 20 YEAR TOTAL |
| | 4 | BUILDINGS | | | | | |
| + | 670 | SCHOOLS TOTAL | \$113,297,971 | \$137,096,350 | \$130,487,500 | \$134,421,000 | \$515,302,821 |
| + | 1684 | MUNICIPAL BLDGS TOTAL | \$32,560,233 | \$41,585,070 | \$26,081,440 | \$35,875,010 | \$136,101,753 |
| | 1685 1686 | BUILDINGS TOTAL | \$145,858,204 | \$178,681,420 | \$156,568,940 | \$170,296,010 | \$651,404,574 |
| | | ROADS / PAVING | | | | | |
| | 1815 | ROADS / BRIDGES TOTAL | \$15,294,440 | \$17,619,750 | \$20,914,500 | \$24,782,250 | \$78,610,940 |
| + | 1824 | PRKG LOTS / METERS TOTAL | \$375,000 | \$430,500 | \$474,500 | \$562,250 | \$1,842,250 |
| + | 1829 | SIDEWALKS TOTAL | \$1,181,678 | \$1,476,000 | \$1,533,000 | \$1,816,500 | \$6,007,178 |
| + | 1832 | ST/TRAFFIC LIGHTS TOTAL | \$100,000 | \$123,000 | \$146,000 | \$173,000 | \$542,000 |
| | 1833 | ROADS TOTAL | \$16,951,118 | \$19,649,250 | \$23,068,000 | \$27,334,000 | \$87,002,368 |
| | 1834 | | | | | | |
| | 1835 | WATER | | | | | |
| + | 1916 | WATER PIPES TOTAL | \$21,823,577 | \$24,970,230 | \$29,639,460 | \$35,120,730 | \$111,553,997 |
| + + + + | 1921 | PUMP STATIONS TOTAL | \$103,500 | \$123,000 | \$146,000 | \$173,000 | \$545,500 |
| + | 1926 | WATER TANKS TOTAL | \$688,514 | | \$876,000 | | \$1,564,514 |
| + | 1931 | RESEVOIR TOTAL | | | \$146,000 | \$259,500 | \$405,500 |
| | 1932 | WATER METERS | | | | \$25,950,000 | \$25,950,000 |
| | 1933 | WATER TOTAL | \$22,615,591 | \$25,093,230 | \$30,807,460 | \$61,503,230 | \$140,019,511 |
| | 1934 | | | | | | |
| | | SEWER | | | | | |
| + | 1942 | SEWER PIPES TOTAL | \$25,164,159 | \$23,621,444 | \$15,622,000 | \$25,085,000 | \$89,492,603 |
| + | 1954 | PUMP STATIONS TOTAL | \$835,186 | \$799,500 | \$657,000 | \$951,500 | \$3,243,186 |
| | 1955 | | \$25,999,345 | \$24,420,944 | \$16,279,000 | \$26,036,500 | \$92,735,789 |
| | 1956 | | | | | | |

20-year Projected Capital Needs

By Facility-

| | 1 | City of Newton 20 Year Long | Range Canital P | rojection - Break | out by Facility | | |
|----------------|-----|---|-----------------|-------------------|-----------------|---------------|---------------|
| | 2 | Cost estimates include 3.5% escalation. | | rojection break | out by ruemey | | |
| | 3 | ASSET TYPES | FY14-FY18 CIP | FY19-FY23 CIP | FY24-FY28 CIP | FY29-FY33 CIP | 20 YEAR TOTAL |
| | 4 | BUILDINGS | | | | | |
| Γ · | 5 | SCHOOLS | | | | | |
| + | 33 | Carr Elementary | \$11,700,000 | \$123,000 | | \$259,500 | \$12,082,500 |
| + | 61 | Angier Elementary | \$35,000,000 | | \$146,000 | \$259,500 | \$35,405,500 |
| + | 90 | Cabot Elementary | \$38,250,000 | | | | \$38,250,000 |
| + | 119 | Zervas Elementary | \$18,330,000 | \$24,250,000 | | | \$42,580,000 |
| + | 147 | Ward Elementary | \$200,000 | \$38,130,000 | | | \$38,330,000 |
| + | 177 | Lincoln-Eliot Elementary | \$3,872,231 | \$645,750 | \$44,895,000 | | \$49,412,981 |
| + | 205 | Bigelow Middle School | \$277,179 | \$3,997,500 | \$3,796,000 | | \$8,070,679 |
| + | 234 | Williams Elementary | | \$19,249,500 | | \$692,000 | \$19,941,500 |
| + | 262 | Brown Middle School | \$277,179 | \$3,044,250 | \$4,380,000 | \$1,557,000 | \$9,258,429 |
| + | 292 | Peirce Elementary | \$248,400 | \$20,110,500 | | | \$20,358,900 |
| + | 321 | Oak Hill Middle School | | \$2,398,500 | \$1,168,000 | \$346,000 | \$3,912,500 |
| | 349 | Countryside Elementary | | | \$22,630,000 | | \$22,630,000 |
| lacktriangle | 377 | Day Middle School | \$495,174 | \$4,335,750 | | \$865,000 | \$5,695,924 |
| \blacksquare | 406 | Franklin Elementary | | \$861,000 | \$23,104,500 | | \$23,965,500 |
| | 434 | Newton South High School | \$602,450 | \$5,658,000 | \$28,908,000 | \$1,384,000 | \$36,552,450 |
| + | 463 | Mason-Rice Elementary | | \$1,623,600 | | \$25,950,000 | \$27,573,600 |
| + | 494 | Education Center | \$1,749,781 | \$4,274,250 | | \$3,633,000 | \$9,657,031 |
| + | 523 | Burr Elementary | \$114,752 | \$1,328,400 | \$146,000 | \$25,950,000 | \$27,539,152 |
| + | 553 | Underwood Elementary | | \$1,814,250 | \$146,000 | \$26,469,000 | \$28,429,250 |
| + | 583 | Horace Mann Elementary | \$709,584 | \$1,162,350 | | \$27,680,000 | \$29,551,934 |
| + | 612 | Bowen Elementary | \$100,000 | \$1,537,500 | | \$346,000 | \$1,983,500 |
| + | 640 | Memorial Spaulding Elementary | | \$891,750 | \$438,000 | \$1,297,500 | \$2,627,250 |
| + | 668 | Newton North High School | | \$1,045,500 | | \$16,867,500 | \$17,913,000 |
| Γ. | 669 | School Fuel Tank Removal | \$1,371,240 | \$615,000 | \$730,000 | \$865,000 | \$3,581,240 |
| - | 670 | SCHOOLS TOTAL | \$113,297,971 | \$137,096,350 | \$130,487,500 | \$134,421,000 | \$515,302,821 |

20-year Projected Capital Needs

By Facility Component-

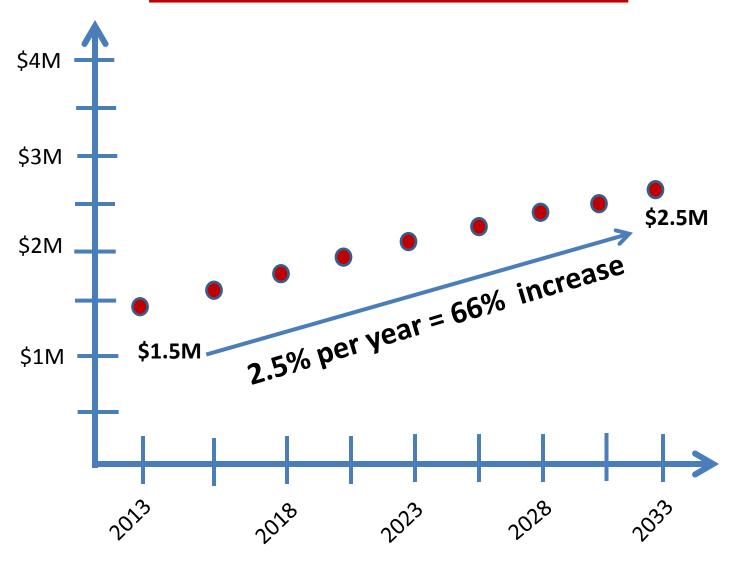
| | | | | + | | | | | |
|-----|---------|-----|---|---|---------------|---------------|---------------|---------------|--|
| | | 1 | | | | | | | |
| | 1-1.1-1 | 2 | | | | | | | |
| 1 2 | 3 4 5 | | A B C | L | N | P | R | S | |
| | | | | apital Projection - Break-out by Facility | | | | | |
| | | 2 | Cost estimates include 3.5% escalation. | | | | | | |
| | | 3 | ASSET TYPES | FY14-FY18 CIP | FY19-FY23 CIP | FY24-FY28 CIP | FY29-FY33 CIP | 20 YEAR TOTAL | |
| + |] | 406 | Franklin Elementary | | \$861,000 | \$23,104,500 | | \$23,965,500 | |
| ١١٢ | | 407 | Newton South High School | | | | | | |
| | | 408 | Mechanical | | | | | | |
| | | 409 | Generation - Boiler, Chiller | | \$246,000 | | | \$246,000 | |
| | | 410 | Generation - Air handlers | \$430,321 | \$2,706,000 | | | \$3,136,321 | |
| | | 411 | Distribution | | \$1,845,000 | | | \$1,845,000 | |
| | • | 412 | Controls / EMS | | \$369,000 | | \$259,500 | \$628,500 | |
| | • | 413 | Underground Tanks | | | | | | |
| | • | 414 | Electrical/Alt Energy | | | | | | |
| Ш | • | 415 | Emergency Generator | | | | \$865,000 | \$865,000 | |
| Ш | • | 416 | Switch Gear / Panels | | | | | | |
| | • | 417 | Distribution | | | | | | |
| | • | 418 | | | \$184,500 | | | \$184,500 | |
| | • | 419 | | | | | | | |
| | • | 420 | | | | | | | |
| | • | 421 | Distribution | | | | | | |
| | • | 422 | Fixtures | | | | | | |
| | • | 423 | Sprinklers/Fire Alarm | \$172,128 | | | | \$172,128 | |
| | • | 424 | Building Envelope | | | | | | |
| | • | 425 | Masonry/Walls | | | \$2,190,000 | | \$2,190,000 | |
| Ш | • | 426 | Windows & Doors | | | \$4,380,000 | | \$4,380,000 | |

20-year Capital Needs Projection

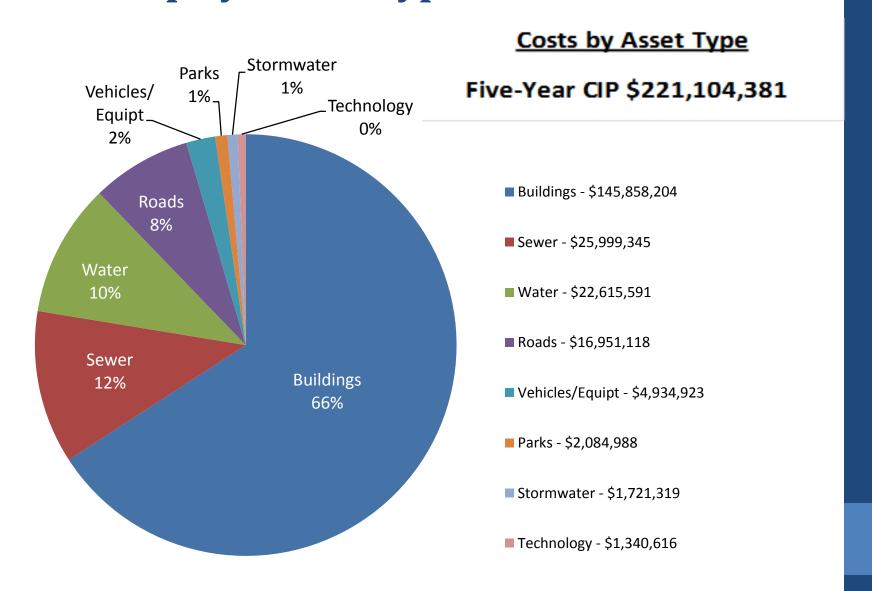
By Component of each facility-

| City of Newton 20 year Long ? | ange Capita | l Plan | | | | 9.28.12 |
|---|------------------|------------------|------------------|------------------|---------------|----------------------------|
| Cost estimates in Jude 3.5% escalation. | | | | | | |
| ASSET TYPES | F/14-FY18 CIP | FY19-FY23 CIP | FY24-FY28 CIP | FY29-FY33 CIP | 20 YEAR TOTAL | NOTES |
| City Hall | | | | | | |
| Mechanical | | | | | | |
| Generation - Boilers | | | | | | |
| Generation - Air handlers | | | | | | |
| Distribution | \$406,396 | | | | \$406,396 | |
| Controls / EMS | | | | | | |
| Underground Tank & Paving | | | | | | |
| Electrical/Alt Energy | | | | | | |
| Emergency Generator | | \$276,750 | | | \$276,750 | |
| Switch Gear / Panels | | | | | | |
| Distribution | | \$159,900 | | | \$159,900 | |
| Lighting and Controls | | | | | | |
| Plumbing + Fire Protection | | | | | | |
| Pumps | | | | | | |
| Distribution | | \$168,510 | | | \$168,510 | |
| Fixtures | \$103,500 | | | | \$103,500 | make toilet rms accessible |
| Sprinklers/Fire Alarm | | \$1,494,450 | | | \$1,494,450 | |
| Building Envelope | | | | | | |
| Masonry/Walls | \$133,903 | | | | \$133,903 | |
| Windows & Doors | | | | | | 50% CPC est. |
| Roof | | \$1,507,980 | | | \$1,507,980 | \$1M for slate |
| Entrance Stairs/Ramps | | \$398,520 | | | \$398,520 | |
| Building Interior | | | | | | |
| Stairs / Elevators | | \$369,000 | | | \$369,000 | lift in FY13 & elevator |
| Finishes (Flrs, Walls, Ceilgs) | | \$837,630 | \$146,0 0 | \$173,000 | \$1,156,630 | Vets Aud. BOA chamber |
| Equipment/Furnishing | | | | | | |
| Other (accessibility) | | \$153,750 | | | \$153,750 | |
| Renovate Clerk's Office | | | \$511,000 | | \$511,000 | |
| Customer Service | | \$98,400 | | | \$98,400 | |
| Kitchen/Café Upgrades | | \$205,410 | | | \$205,410 | |
| City Hall | \$643,799 | \$5,670,300 | \$657,000 | \$173,000 | \$7.144.099 | |

Present value vs Future value



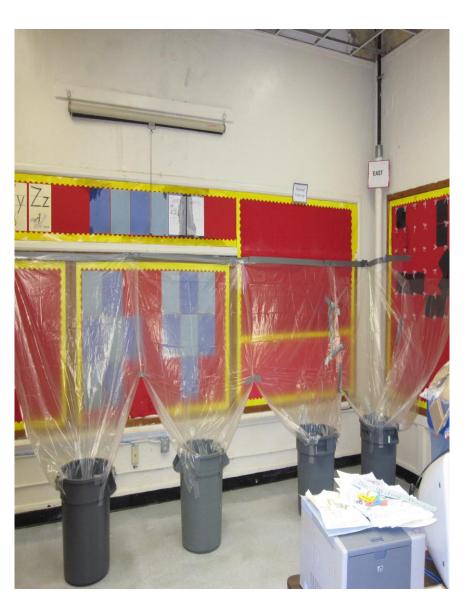
CIP Recap by Asset Type



Priority - Deteriorated & Obsolete Buildings



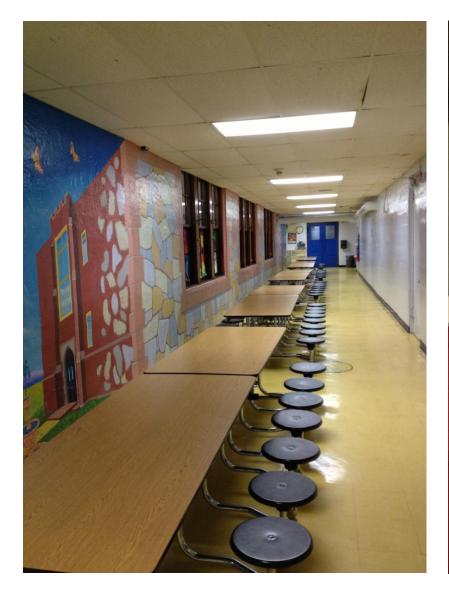
ANGIER Elementary School Water infiltration



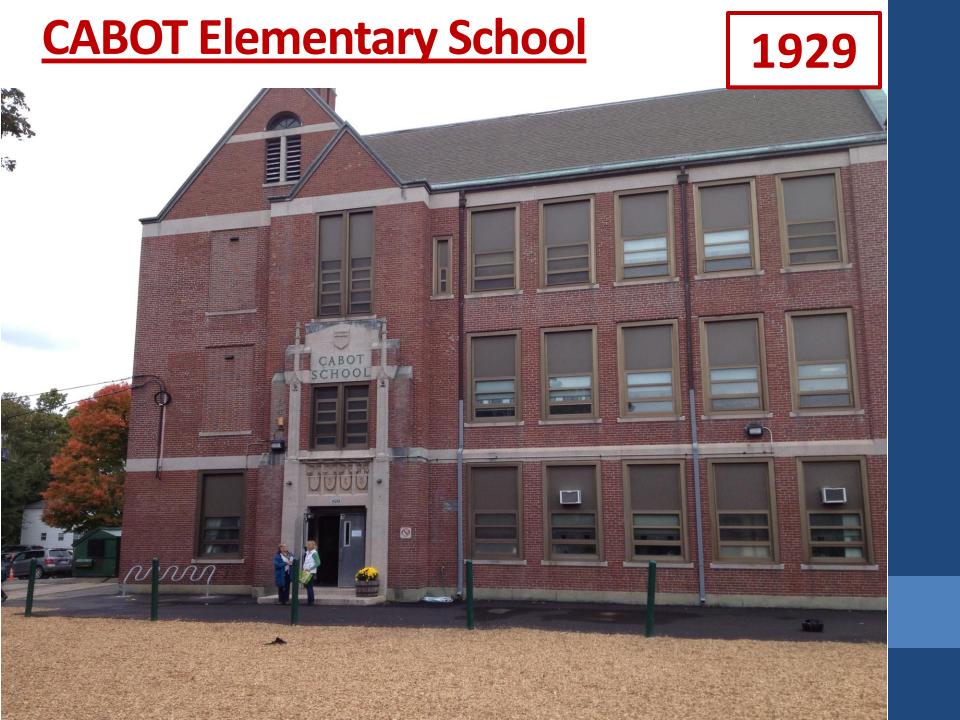


Angier School

Lunch in basement corridor Handicap lift







<u>Cabot School</u> – Extremely small lunchroom seating





<u>Cabot School</u> – Inadequate Specialist Teaching and Staff Offices



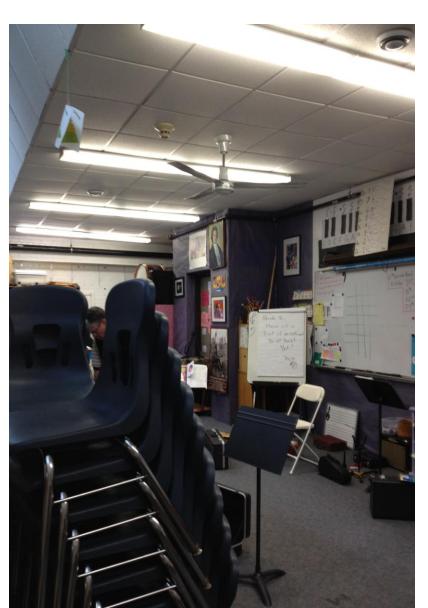


ZERVAS Elementary School

1954



Zervas – Music and Art





FIRE HQs & Emergency Communications Hub





Station 3 (Newton Centre)- Wires Division

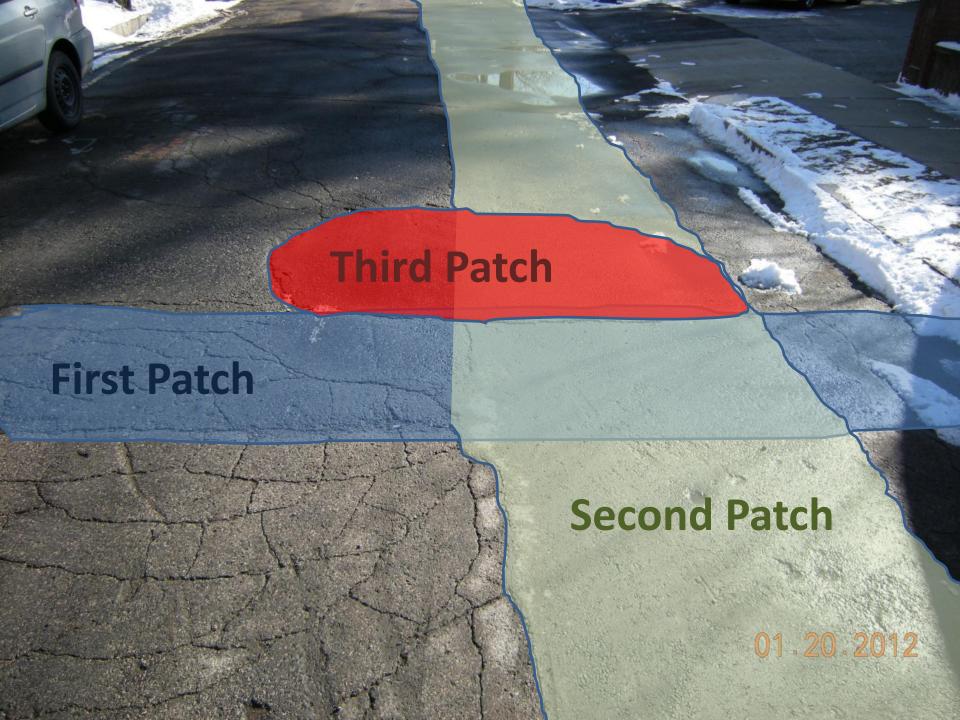




Roads Maintenance

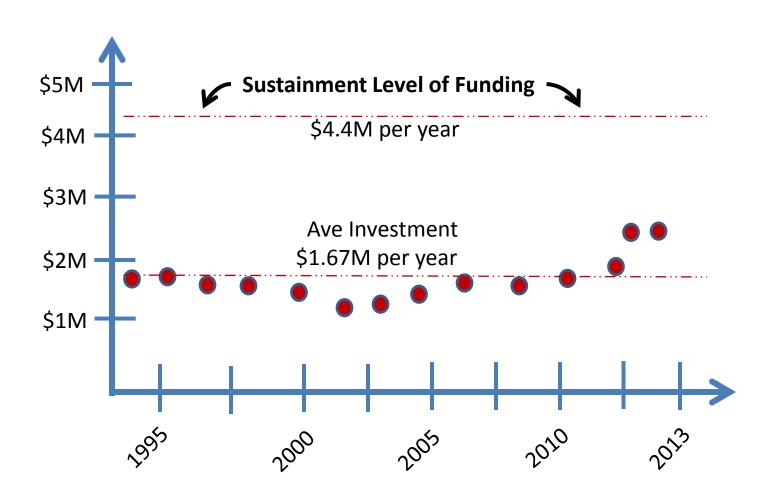




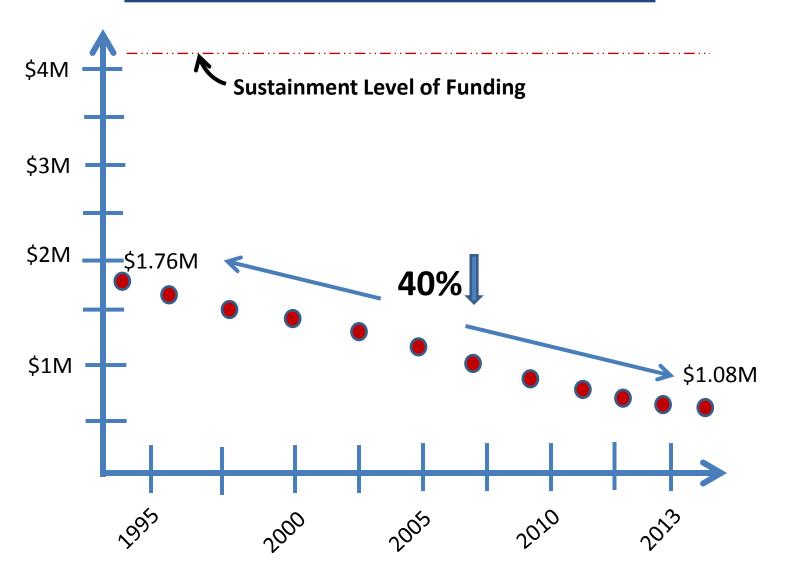




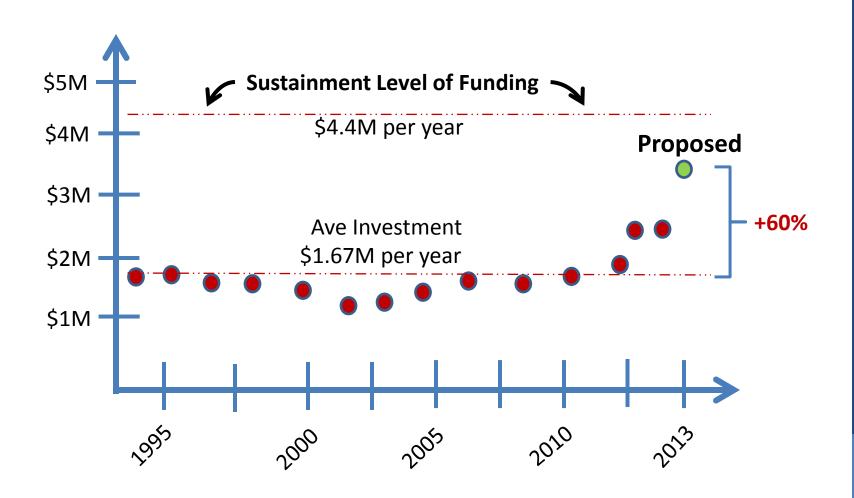
Chapter 90 Funding History



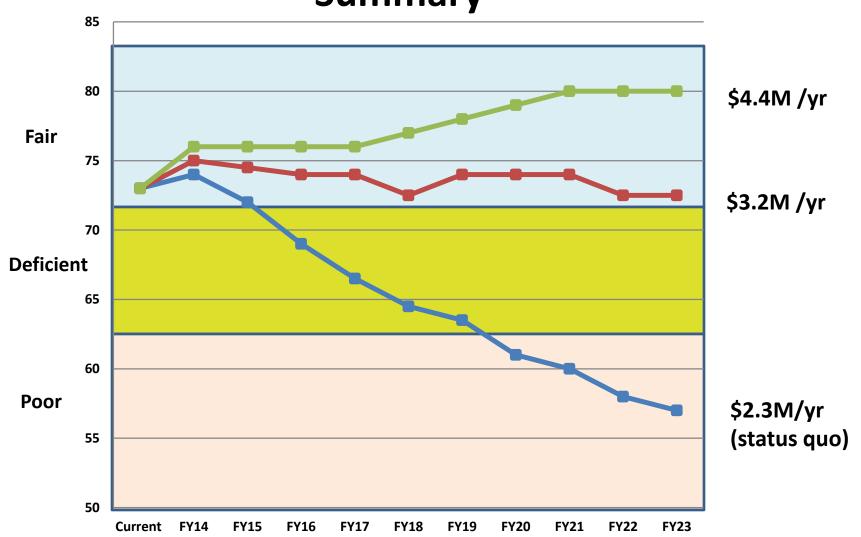
Erosion of Road Investments



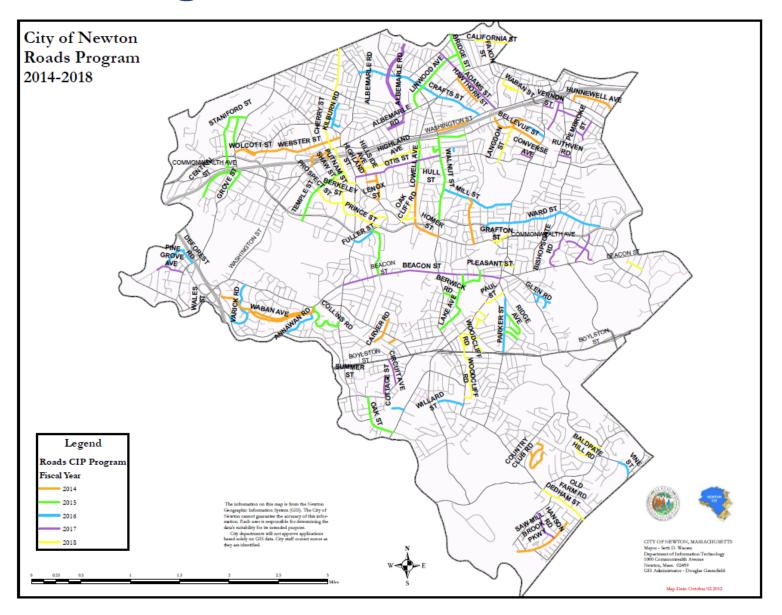
Chapter 90 Funding History



Projected Pavement Condition Summary

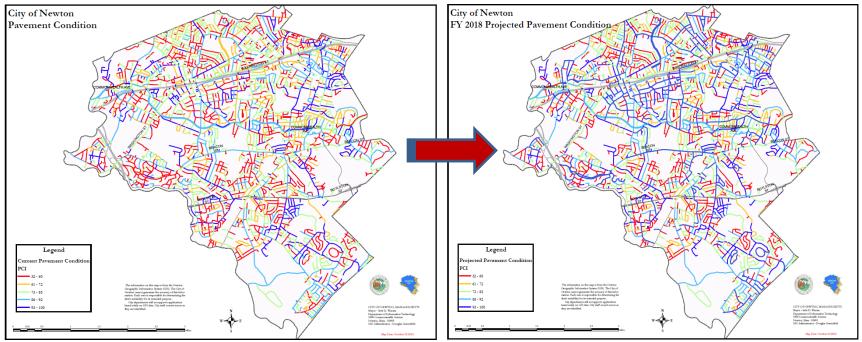


Road Program



Results of Investment

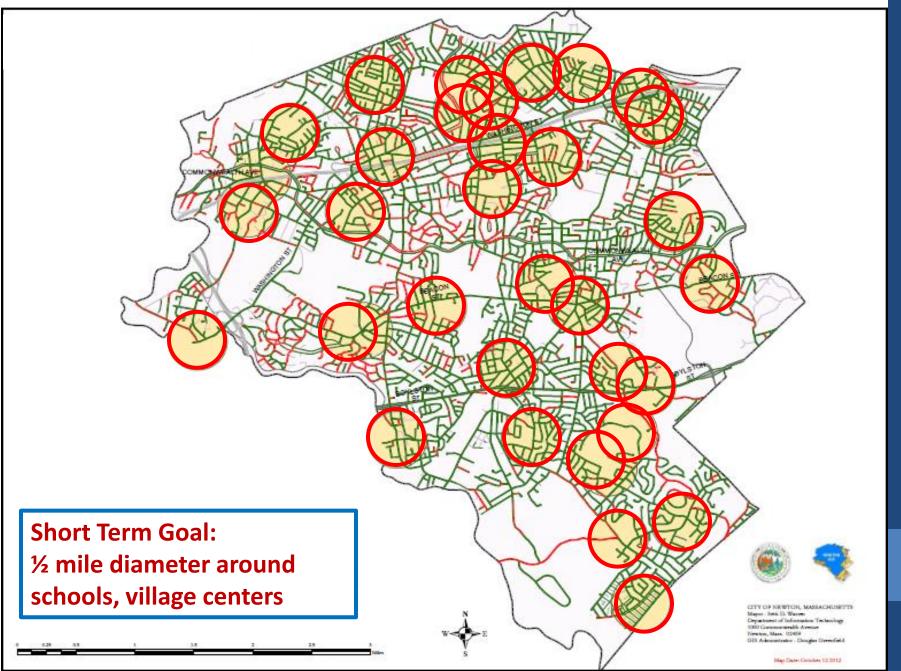




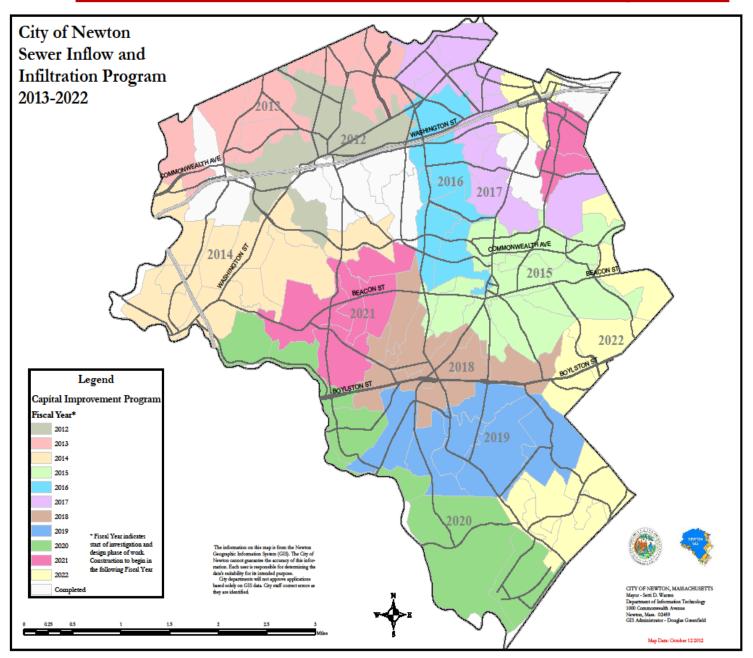
Pavement Condition Index

Blue= Excellent Red= Poor

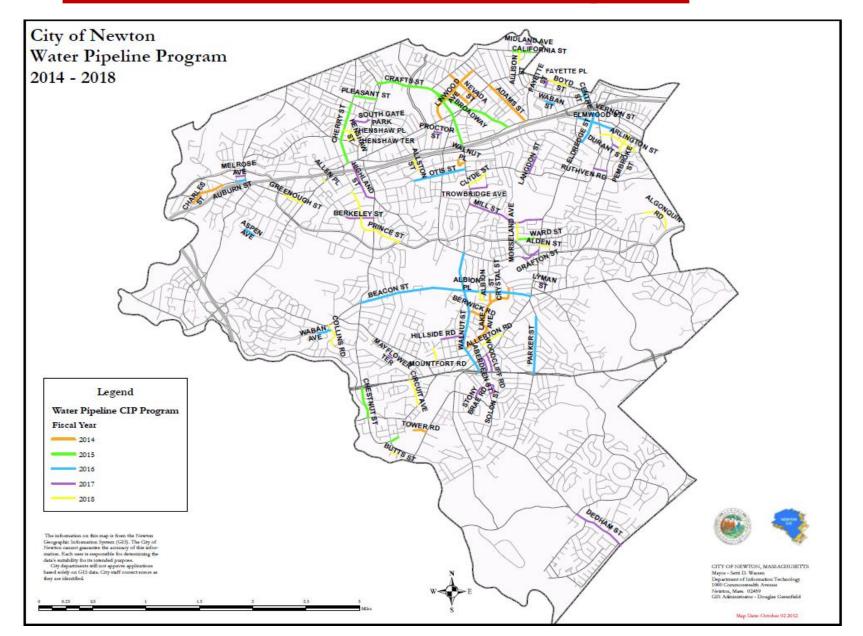
Sidewalks- Priority of Work



Sewer Infrastructure Program



Water Infrastructure Program



Next up:

Chief Financial Officer Maureen Lemieux

w/ Financial Forecast